Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An integrated circuit including an electrical over stress shunt, comprising:

a voltage threshold detector comprising a plurality of programmable resistive elements programmable by selective activation of at least one individual programmable resistive element, said voltage threshold detector to detect an electrical over stress event wherein a potential is measured between a higher potential power rail and a lower potential ground rail in excess of a predetermined voltage, said electrical over stress event occurring during a difference in an order in which connections are made or unmade between contacts of a powered device and contacts of an unpowered device as they are connected or disconnected; and

a switchable low resistance path between said power rail and said ground rail, said low resistance path being adapted to be switched ON for a duration of said electrical over stress event lasting significantly longer than 2 microseconds.

2. (cancelled)

3. (previously presented) The integrated circuit including an electrical over stress shunt according to claim 1, wherein:

said low resistance path is adapted to be switched ON for longer than 1000 microseconds.

4. (original) The integrated circuit including an electrical over stress shunt according to claim 3, wherein:

said low resistance path is adapted to be switched ON for longer

than 4000 microseconds.

5. (original) The integrated circuit including an electrical over stress shunt according to claim 1, further comprising:

a driver between said voltage threshold detector and said switchable low resistance path.

6. (original) The integrated circuit including an electrical over stress shunt according to claim 5, wherein:

said driver comprises a series connection of a plurality of inverters.

7. (original) The integrated circuit including an electrical over stress shunt according to claim 1, wherein said switchable low resistance path comprises:

a MOSFET transistor.

8. (original) The integrated circuit including an electrical over stress shunt according to claim 1, wherein:

said integrated circuit includes a Firewire IEEE 1394 interface.

9. (currently amended) In an integrated circuit, a power distribution system comprising:

a power rail;

a ground rail;

an electrical over stress detector comprising a plurality of programmable resistive elements, said programmable resistive elements programmable by selective activation of at least one individual programmable resistive element; and

an electrical over stress shunt connected between said power rail and said ground rail, said electrical over stress shunt being capable of causing a low resistance path to be turned on between said power rail and said ground rail for an entire duration lasting significantly more than 2 microseconds when said electrical over stress detector determines that a potential of said power rail is greater than a potential of said ground rail by more than a predetermined threshold during a difference in an order in which connections are made or unmade between contacts of a powered device and contacts of an unpowered device as they are connected or disconnected.

10. (original) In an integrated circuit according to claim 9, wherein:

said integrated circuit is based on 3.3 v technology.

11. (original) In an integrated circuit according to claim 9, wherein:

said predetermined threshold is at least 5 volts.

12. (cancelled)

13. (previously presented) In an integrated circuit according to claim 9, wherein:

said low resistance path is adapted to be switched ON for longer than 1000 microseconds.

14. (original) In an integrated circuit according to claim 9, wherein said low resistance path comprises:

a MOSFET transistor.

15. (currently amended) A method of providing robustness to an electrical circuit from an electrical over stress event, said method comprising:

detecting an EOS condition with a EOS detector comprising ~~using~~ a plurality of programmable resistive elements programmable by selective activation of at least one individual programmable resistive element wherein a potential of a power rail of said electrical circuit becomes greater than a potential of a ground rail of said electrical circuit by more than a predetermined threshold, said EOS condition occurring during a difference in an order in which connections are made or unmade between contacts of a powered device and contacts of an unpowered device as they are connected or disconnected;

turning ON a low resistance path between said power rail and said ground rail for a duration of an occurrence of said detected EOS condition lasting significantly more than 2 microseconds .

16. (original) The method of providing robustness to an electrical circuit from an electrical over stress event according to claim 15, wherein:

said predetermined threshold is at least 5 volts.

17. (cancelled)

18. (previously presented) The method of providing robustness to an electrical circuit from an electrical over stress event according to claim 15, wherein:

said low resistance path is adapted to be switched ON for longer than 1000 microseconds.

19. (currently amended) Apparatus for providing robustness to an electrical circuit from an electrical over stress event, comprising:

an EOS detecting means comprising a plurality of programmable resistive elements programmable by selective activation of at least one individual programmable resistive element, and for detecting an EOS condition wherein a potential of a power rail of said electrical circuit becomes greater than a potential of a ground rail of said electrical circuit by more than a predetermined threshold, said EOS condition occurring during a difference in an order in which connections are made or unmade between contacts of a powered device and contacts of an unpowered device as they are connected or disconnected; and

a means for turning ON a low resistance path between said power rail and said ground rail for a duration of an occurrence of said detected EOS condition lasting significantly more than 2 microseconds.

20. (original) The apparatus for providing robustness to an electrical circuit from an electrical over stress event according to claim 19, wherein:

said predetermined threshold is at least 5 volts.

21. (cancelled)

22. (previously presented) The apparatus for providing robustness to an electrical circuit from an electrical over stress event according to claim 19, wherein:

said low resistance path is adapted to be switched ON for longer than 1000 microseconds.

23. (currently amended) A circuit including an electrical over stress shunt, comprising:

a voltage threshold detector comprising a plurality of programmable resistive elements programmable by selective activation of at least one individual programmable resistive element, said voltage threshold detector to detect an electrical over stress event ~~comprising a programmable element~~ wherein a potential is measured between a higher potential power rail and a lower potential ground rail in excess of a predetermined voltage, said electrical over stress event occurring during a difference in an order in which connections are made or unmade between contacts of a powered device and contacts of an unpowered device as they are connected or disconnected; and

a switchable low resistance path between said power rail and said ground rail, said low resistance path being adapted to be switched ON for a duration of said electrical over stress event lasting significantly longer than 2 microseconds..

24. (original) The circuit including an electrical over stress shunt according to claim 23, wherein:

said low resistance path is adapted to be switched ON for longer than 1000 microseconds.

25. (original) The circuit including an electrical over stress shunt according to claim 23, further comprising:

a Firewire IEEE 1394 interface.

26. (previously presented) The integrated circuit including an electrical over stress shunt according to claim 1, wherein:

one of said powered device and said unpowered device is a cable.

27. (previously presented) In an integrated circuit according to claim 9, wherein:

one of said powered device and said unpowered device is a cable.

28. (previously presented) The method of providing robustness to an electrical circuit from an electrical over stress event according to claim 15, wherein:

one of said powered device and said unpowered device is a cable.

29. (previously presented) The apparatus for providing robustness to an electrical circuit from an electrical over stress event according to claim 19, wherein:

one of said powered device and said unpowered device is a cable.

30. (previously presented) The circuit including an electrical over stress shunt according to claim 23, wherein:

one of said powered device and said unpowered device is a cable.

31. (previously presented) The integrated circuit including an electrical over stress shunt according to claim 1, wherein:

one of said powered device and said unpowered device is a connector.

32. (previously presented) In an integrated circuit according to claim 9, wherein:

one of said powered device and said unpowered device is a connector.

33. (previously presented) The method of providing robustness to an electrical circuit from an electrical over stress event according to claim 15, wherein:

one of said powered device and said unpowered device is a connector.

34. (previously presented) The apparatus for providing robustness to an electrical circuit from an electrical over stress event according to claim 19, wherein:

one of said powered device and said unpowered device is a connector.

35. (previously presented) The circuit including an electrical over stress shunt according to claim 23, wherein:

one of said powered device and said unpowered device is a connector.

36. (currently amended) The method of providing robustness to an electrical circuit from an electrical over stress event according to claim 15, wherein:

~~the~~ a current drawn in detecting ~~an~~ said EOS condition is minimized.